- 83. (New) A monoclonal antibody or a portion thereof, comprising a property selected from the group consisting of:
- (a) reactive to a connective tissue growth factor (CTGF) selected from the group consisting of human, mouse and rat;
- (b) inhibiting binding of human or mouse CTGF to human kidney-derived fibroblast cell line 293-T (ATCC CRL1573);
- (c) inhibiting binding of human CTGF to a cell selected from the group consisting of rat kidney-derived fibroblast cell line NRK-49F (ATCC CRL-1570), human osteosarcoma-derived cell line MG-63 (ATCC CRL-1427), and human lung-derived fibroblasts;
- (d) inhibiting cell proliferation of rat kidney-derived fibroblast cell line NRK-49F (ATCC CRL-1570) induced by a stimulus with human or mouse CTGF; and
 - (e) inhibiting an increase of an elevated level of hydroxyproline in the kidney.
- 84. (New) The monoclonal antibody or a portion thereof as claimed in claim 83, comprising a further property selected from the group consisting of:
- (f) obtainable by immunizing a mouse with human CTGF or a portion thereof, and reactive to a CTGF of a mammal selected from the group consisting of a human, mouse and rat;
- (g) obtainable by immunizing a hamster with mouse CTGF or a portion thereof, and reactive to a CTGF of a mammal selected from the group consisting of a human, mouse and rat; and
- (h) obtainable by immunizing a rat with mouse CTGF or a portion thereof, and reactive to a CTGF of a mammal selected from the group consisting of a human, mouse and rat.
- 85. (New) The monoclonal antibody or a portion thereof as claimed in claim 83, further comprising a property selected from the group consisting of:
- (i) obtainable by immunizing a mouse with human CTGF or a portion thereof, reactive to human, mouse and rat CTGFs and inhibiting binding of human CTGF to human kidney-derived fibroblast cell line 293-T (ATCC CRL1573);
- (j) obtainable by immunizing a rat with mouse CTGF or a portion thereof, reactive to human, mouse and rat CTGFs and inhibiting binding of mouse and rat CTGFs and inhibiting binding of mouse CTGF to human kidney-derived fibroblast cell line 293-T (ATCC CRL1573); and



- (k) obtainable by immunizing a hamster with mouse CTGF or a portion thereof, and reactive to human, mouse and rat CTGFs and inhibiting binding of mouse CTGF to human kidney-derived fibroblast cell line 293-T (ATCC CRL1573).
- 86. (New) The monoclonal antibody or a portion thereof according to claim 83, wherein said monoclonal antibody is produced by or comprises a property substantially equivalent to that of a monoclonal antibody produced by a hybridoma identified by an international deposit accession No. selected from the group consisting of RERM BP-6208 and FERM BP-6209.
- 87. (New) A human monoclonal antibody or a portion thereof, reactive to a CTGF selected from the group consisting of human, mouse and rat.
- 88. (New) The human monocloral antibody or a portion thereof as claimed in claim 87, wherein said human monoclonal antibody is reactive to human CTGF.
- 89. (New) A human monoclonal antibody or a portion thereof, reactive to human CTGF comprising a property selected from the group consisting of:
- (a) inhibiting binding of human CTGF to human kidney-derived fibroblast cell line 293-T (ATCC CRL1573);
- (b) inhibiting binding of human CTGF to any of rat kidney-derived fibroblast cell line NRK-49F (ATCC CRL-1570), human osteosarcoma-derived cell line MG-63 (ATCC CRL-1427), or human lung-derived fibroblasts;
- (c) inhibiting the cell proliferation of rat kidney-derived fibroblast cell line NRK-49F (ATCC CRL-1570) induced by a stimulus with human or mouse CTGF; and
 - (d) inhibiting an increase of an elevated level of hydroxyproline in kidney.
- 90. (New) The human monoclonal antibody or a portion thereof as claimed in claim 89, wherein said monoclonal antibody is further characterized by being derived from a non-human transgenic mammal which is capable of producing a human antibody.



- 91. (New) The human monoclonal antibody or a portion thereof as claimed in claim 90, wherein said monoclonal antibody is still further characterized by being derived from immunizing a non-human transgenic mammal which is capable of producing a human antibody, with human CTGF.
- 92. (New) The human monoclonal antibody or a portion thereof as claimed in claim 91, wherein said non-human transgenic mammal is a transgenic mouse.
- 93. (New) The human monoclonal antibody or a portion thereof as claimed in claim 88, wherein a V-region DNA encoding a heavy chain variable region of said human monoclonal antibody is derived from a gene segment selected from the group consisting of DP-5, DP-38, DP-65 and DP-75 and further wherein a V-region DNA encoding a light chain variable region of said human monoclonal antibody is derived from a gene segment selected from the group consisting of DPK1, DPK9, DPK12 and DPK24.
- 94. (New) The human monoclonal antibody or a portion thereof as claimed in claim 88, wherein an amino acid sequence of a heavy chain variable region of said human monoclonal antibody comprises an amino acid sequence selected from the group consisting of:
 - (a) the amino acid positions 21 to 120 of the amino acid sequence of SEQ ID NO: 6;
- (b) the amino acid positions 21 to 120 of the amino acid sequence of SEQ ID NO: 6, wherein one or more amino acids are deleted, substituted, inserted or added;
 - (c) the amino acid positions 21 to 118 of the amino acid sequence of SEQ ID NO: 8;
- (d) the amino acid positions 21 to 118 of the amino acid sequence of SEQ ID NO: 8, wherein one or more amino acids are deleted, substituted inserted or added;
 - (e) the amino acid positions 21 to 116 of the amino acid sequence of SEQ ID NO: 10;
- (f) the amino acid positions 21 to 116 of the amino acid sequence of SEQ ID NO: 10, wherein one or more amino acids are deleted, substituted, inserted or added;
 - (g) the amino acid positions 21 to 116 of the amino acid sequence of SEQ ID NO: 12;
- (h) the amino acid positions 21 to 116 of the amino acid sequence of SEQ ID NO: 12, wherein one or more amino acids are deleted, substituted, inserted or added;
 - (i) the amino acid positions 21 to 117 of the amino acid sequence of SEQ ID NO: 14; or,



- (j) the amino acid positions 21 to 117 of the amino acid sequence of SEQ ID NO: 14, wherein one or more amino acids are deleted, substituted, inserted or added.
- 95. (New) The human monoclonal antibody or a portion thereof according to claim 88, wherein an amino acid sequence of a light chain variable region of said human monoclonal antibody comprises an amino acid sequence selected from the group consisting of:
 - (a) the amino acid positions 21 to 120 of the amino acid sequence of SEQ ID NO: 16;
- (b) the amino acid positions 21 to 120 of the amino acid sequence of SEQ ID NO: 16, wherein one or more amino acids are deleted, substituted, inserted or added;
 - (c) the amino acid positions 21 to 121 of the amino acid sequence of SEQ ID NO: 18;
- (d) the amino acid positions 21 to 121 of the amino acid sequence of SEQ ID NO: 18, wherein one or more amino acids are deleted, substituted, inserted or added;
 - (e) the amino acid positions 23 to 117 of the amino acid sequence of SEQ ID NO: 20;
- (f) the amino acid positions 23 to 17 of the amino acid sequence of SEQ ID NO: 20, wherein one or more amino acids are deleted, substituted, inserted or added;
 - (g) the amino acid positions 17 to 11/1 of the amino acid sequence of SEQ ID NO: 22;
- (h) the amino acid positions 17 to 111 of the amino acid sequence of SEQ ID NO: 22, wherein one or more amino acids are deleted, substituted, inserted or added;
 - (i) the amino acid positions 23 to 118 of the amino acid sequence of SEQ ID NO: 24; or,
- (j) the amino acid positions 23 to 118 of the amino acid sequence of SEQ ID NO: 24, wherein one or more amino acids are deleted, substituted, inserted or added.
- 96. (New) A monoclonal antibody or a portion thereof, reactive to human CTGF. which is produced by a hybridoma identified by an international deposit accession No. selected from the group consisting of FERM BP-6598, FERM BP-6599, FERM BP-6600 and FERM BP-6535.
- 97. (New) A monoclonal antibody or a portion thereof, reactive to human CTGF and comprises a property substantially equivalent to that of a monoclonal antibody produced by a hybridoma identified by an international deposit accession No. selected from the group consisting of FERM BP-6598, FERM BP-6599, FERM BP-6600 and FERM BP-6535.

